

Data release from the Allen Institute for Brain Science expands online atlas offerings

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The Allen Institute for Brain Science announced today its latest public data release, enhancing online resources available via the [Allen Brain Atlas data portal](#) and expanding its application programming interface (API).

With this release, the Allen Institute has expanded access to its data and services via the Allen Brain Atlas API and added new data and feature enhancements to four atlas resources: the Allen [Human Brain Atlas](#), the Allen [Mouse Brain](#) Connectivity Atlas, the Allen Developing Mouse Brain Atlas, and the Allen Mouse Brain Atlas. In addition, two new video tutorials have been added to the Institute's tutorial library.

The Allen Human Brain Atlas, a multi-modal, three-dimensional map of the human brain that integrates anatomical and gene expression data throughout the adult human brain, has been expanded to include gene expression data from brains of [autistic individuals](#), allowing scientists to compare disease and control states. In addition, the Atlas contains new features to facilitate search, navigation, and download of data.

The Allen Mouse Brain Connectivity Atlas is a three-dimensional, high-resolution map of [neural connections](#) throughout the mouse brain. Today's data release expands the set of available high-resolution images of axonal projections and adds multiplanar viewing capabilities, offering a first step towards three-dimensional visualization of neural connectivity throughout the mouse brain. This foundational map will help scientists understand how the brain is wired, offering new insights

into how the brain works and what goes awry in brain diseases and disorders.

Additionally, the Allen Mouse Brain Atlas and the Allen Developing Mouse Brain Atlas have been updated with new search capabilities based on additional data annotation, allowing users to explore the [gene expression data](#) in new ways.

[Application Programming Interface \(API\)](#)

To broaden the user community and enable further innovation, the Allen Institute has expanded access to its data and services via the Allen Brain Atlas API, now offering access to data from across the suite of Allen Brain Atlas resources. The Allen Brain Atlas API provides the programming community with under-the-hood access to the Allen Institute's vast datasets, sample applications and programming solutions for data searches and download, as well as opportunities for discovery and creation of new applications or data representations. This release coincides with the Allen Brain Atlas Hackathon, an elite programming event to be held later this month.

Available data in the Allen Brain Atlas API includes high-resolution images, 3-D expression summaries, primary microarray and RNA-sequencing results, and MRI and DTI files from across the Institute's suite of atlas resources. Services offered by the Allen [Brain Atlas](#) API include RESTful model access to retrieve all experimental information; image download service for all gene expression, connectivity, histology and atlas data; as well as API access to various integrated search services.

Provided by Allen Institute for Brain Science

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